

What is claimed:

1. ~~A computer readable recording medium recorded with a diagnosis supporting program for realizing on a computer:~~

~~a lesion position detecting function for detecting a lesion position from a diagnosis target image;~~

~~a feature quantity extracting function for extracting image-wise feature quantities of the lesion position detected by said lesion position detecting function; and~~

~~a reference image retrieving function for retrieving reference images which are image-wise similar to the diagnosis target image out of a database stored with reference images and feature quantities of reference images, based on the feature quantities extracted by said feature quantity extracting function.~~

2. A computer readable recording medium recorded with a diagnosis supporting program of claim 1, further comprising:

~~a database registering function for registering said diagnosis target image and feature quantities thereof into said database.~~

3. A computer readable recording medium recorded with a diagnosis supporting program of claim 1, further comprising:

~~a similarity calculating function for calculating image-wise similarities between each of the reference images stored in said database and the diagnosis target image, respectively, by matching the feature quantities of each of the reference images stored in said database with the feature quantities of the diagnosis target image,~~

~~wherein said reference image retrieving function retrieves reference images in order of similarity as calculated by said similarity calculating function.~~

4. A computer readable recording medium recorded with a diagnosis supporting program of claim 3,

~~wherein said similarity calculating function calculates similarities, taking account of the weighting set for each organ.~~

5. ~~A computer readable recording medium recorded with a diagnosis supporting program of claim 4,~~

~~wherein said weighting is set in a variably constituted table.~~

6. A computer readable recording medium recorded with a diagnosis supporting program of claim 1, further comprising:

a finding displaying function for displaying findings related to the reference images retrieved by said reference image retrieving function.

7. A computer readable recording medium recorded with a diagnosis supporting program of claim 1,

wherein said lesion position detecting function detects a lesion position of a designated organ.

8. A computer readable recording medium recorded with a diagnosis supporting program of claim 1,

wherein said feature quantity extracting function extracts a global feature quantity, a topical feature quantity and a common feature quantity, for every lesion position of the diagnosis target image.

9. A diagnosis supporting apparatus comprising:

a lesion position detecting means for detecting a lesion position from a diagnosis target image;

a feature quantity extracting means for extracting image-wise feature quantities of the lesion position detected by said lesion position detecting means; and

a reference image retrieving means for retrieving reference images which are image-wise similar to the diagnosis target image out of a database stored with reference images and feature quantities of reference images, based on the feature quantities extracted by said feature quantity extracting means.

10. A diagnosis supporting apparatus of claim 9, further comprising:

a database registering means for registering said diagnosis target image and feature quantities thereof into said database.

11. A diagnosis supporting apparatus of claim 9, further comprising:
a similarity calculating means for calculating image-wise similarities between each of the reference images stored in said database and the diagnosis target image, respectively, by matching the feature quantities of each of the reference images stored in said database with the feature quantities of the diagnosis target image,
wherein said reference image retrieving means retrieves reference images in order of similarity as calculated by said similarity calculating means.

12. A diagnosis supporting apparatus of claim 11,
wherein said similarity calculating means calculates similarities, taking account of the weighting set for each organ.

13. A diagnosis supporting apparatus of claim 12,
wherein said weighting is set in a variably constituted table.

14. A diagnosis supporting apparatus of claim 9, further comprising:
a finding displaying means for displaying findings related to the reference images retrieved by said reference image retrieving means.

15. A diagnosis supporting apparatus of claim 9,
wherein said lesion position detecting means detects a lesion position of a designated organ.

16. A diagnosis supporting apparatus of claim 9,
wherein said feature quantity extracting means extracts a global feature quantity, a topical feature quantity and a common feature quantity, for every lesion position of the diagnosis target image.

17. A diagnosis supporting method comprising:
a lesion position detecting process for detecting a lesion position from a diagnosis target image;
a feature quantity extracting process for extracting image-wise feature quantities of the lesion position detected by said lesion position

detecting process; and

BB → a reference image retrieving process for retrieving reference images which are image-wise similar to the diagnosis target image out of a database stored with reference images and feature quantities of reference images, based on the feature quantities extracted by said feature quantity extracting process.

18. A diagnosis supporting method of claim 17, further comprising:
a database registering process for registering said diagnosis target image and feature quantities thereof into said database.

19. A diagnosis supporting method of claim 17, further comprising:
a similarity calculating process for calculating image-wise similarities between each of the reference images stored in said database and the diagnosis target image, respectively, by matching the feature quantities of each of the reference images stored in said database with the feature quantities of the diagnosis target image,
wherein said reference image retrieving process retrieves reference images in order of similarity as calculated by said similarity calculating process.

20. A diagnosis supporting method of claim 19,
wherein said similarity calculating process calculates similarities, taking account of the weighting set for each organ.

21. A diagnosis supporting method of claim 20,
wherein said weighting is set in a variably constituted table.

BB → 22. A diagnosis supporting method of claim 17, further comprising:
a finding displaying process for displaying findings related to the reference images retrieved by said reference image retrieving process.

23. A diagnosis supporting method of claim 17,
wherein said lesion position detecting process detects a lesion position of a designated organ.

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NAME	AGE	RELATION	RESIDENCE	DATE
John Smith	25	Son	123 Main St, New York	1910
Mary Jones	30	Daughter	456 Elm St, Chicago	1911
Robert Brown	40	Husband	789 Oak St, Boston	1912
Elizabeth White	28	Wife	101 Pine St, Philadelphia	1913
James Wilson	35	Son	234 Cedar St, St. Louis	1914
Anna Taylor	22	Daughter	567 Birch St, San Francisco	1915
Charles Davis	38	Husband	890 Spruce St, Portland	1916
Grace Miller	27	Wife	1122 Ash St, Seattle	1917
William Moore	42	Son	345 Willow St, Denver	1918
Elizabeth Clark	32	Daughter	678 Poplar St, Kansas City	1919
John Adams	29	Son	901 Hickory St, Omaha	1920
Mary Baker	24	Daughter	1234 Walnut St, St. Paul	1921
Robert Lewis	37	Husband	1567 Chestnut St, Minneapolis	1922
Elizabeth Hall	26	Wife	1890 Sycamore St, Des Moines	1923
James King	41	Son	2123 Magnolia St, Iowa City	1924
Anna Scott	23	Daughter	2456 Dogwood St, Ames	1925
Charles Green	36	Husband	2789 Redwood St, Davenport	1926
Grace Adams	21	Daughter	3012 Cypress St, Rockford	1927
William Brown	39	Son	3345 Juniper St, Peoria	1928
Elizabeth Taylor	28	Wife	3678 Fir St, Springfield	1929
John Wilson	43	Son	3901 Hemlock St, Joliet	1930
Mary Moore	25	Daughter	4234 Cedar St, Quincy	1931
Robert Clark	34	Husband	4567 Elm St, Macomb	1932
Elizabeth Lewis	27	Wife	4890 Oak St, Normal	1933
James Miller	40	Son	5123 Pine St, Moline	1934
Anna Taylor	22	Daughter	5456 Birch St, Danvers	1935
Charles Davis	38	Husband	5789 Spruce St, Haverhill	1936
Grace Miller	26	Wife	6012 Ash St, Lowell	1937
William Moore	42	Son	6345 Willow St, Andover	1938
Elizabeth Clark	32	Daughter	6678 Poplar St, North Andover	1939
John Adams	29	Son	6901 Hickory St, Merrimack	1940
Mary Baker	24	Daughter	7234 Walnut St, Amesbury	1941
Robert Lewis	37	Husband	7567 Chestnut St, Haverhill	1942
Elizabeth Hall	26	Wife	7890 Sycamore St, North Haverhill	1943
James King	41	Son	8123 Magnolia St, Andover	1944
Anna Scott	23	Daughter	8456 Dogwood St, Danvers	1945
Charles Green	36	Husband	8789 Redwood St, Haverhill	1946
Grace Adams	21	Daughter	9012 Cypress St, North Andover	1947
William Brown	39	Son	9345 Juniper St, Merrimack	1948
Elizabeth Taylor	28	Wife	9678 Fir St, Amesbury	1949
John Wilson	43	Son	9901 Hemlock St, Haverhill	1950